

QUALITY OF LIFE OF HEMODIALYSIS PATIENTS WITH CORONARY DISEASE VERSUS NO CORONARY DISEASE

QUALIDADE DE VIDA DE PACIENTES EM HEMODIÁLISE COM DOENÇA CORONARIANA VERSUS SEM DOENÇA CORONARIANA

ABSTRACT

Introduction: Chronic kidney disease (CKD) is a worldwide public health problem and a predictor of the progression of coronary artery disease (CAD), causing limitations and changes in the daily lives of patients and their families and, therefore, in their quality of life. In this scenario, the Social Worker, as a member of a multiprofessional team, proposes alternatives for coping with situations that compromise patients' health-disease process. The aims of this study were to assess the impact of the presence of CAD on the quality of life of patients on hemodialysis, and to identify the differences in sociodemographic profile of these patients, according to the presence of CAD. **Methods:** A cross-sectional, descriptive study was conducted with 51 patients on hemodialysis treatment, (30 with CAD and 21 without CAD), at a university cardiology hospital in the city of São Paulo, using a quality of life questionnaire for patients on dialysis treatment KDQOL-SF™1.3, a socioeconomic questionnaire, and clinical data described in the electronic medical records. **Results:** Of the total patients, there was a predominance of males, with self-declared color/race Brown and Black, incomplete primary education, and receiving social security benefits. The patients without CAD had been in dialysis treatment for approximately two years more. Among the dimensions of the KDQOL-SF™1.3, patients with CAD had better quality of life indices. **Conclusion:** The quality of life of patients with CKD on hemodialysis and diagnosed with CAD was relatively better than that of patients without CAD. There were no relevant sociodemographic differences between the groups.

Keywords: Renal insufficiency, chronic; Coronary artery disease; Renal dialysis; Quality of life; Social work.

RESUMO

Introdução: A doença renal crônica (DRC) é um problema da saúde pública mundial e preditora para progressão da doença arterial coronariana (DAC), causando limitações e alterações na vida cotidiana dos pacientes e familiares e, consequentemente, na qualidade de vida. Nesse cenário, o Assistente Social, como integrante da equipe multiprofissional, propõe alternativas de enfrentamento às situações que comprometem o processo da saúde-doença dos pacientes. O estudo tem como objetivos avaliar o impacto da presença da DAC na qualidade de vida dos pacientes em hemodiálise e identificar as diferenças no perfil sociodemográfico desses pacientes, conforme a presença da doença. **Método:** Estudo transversal e descritivo realizado com 51 pacientes em hemodiálise (30 com DAC e 21 sem DAC), em um hospital universitário de cardiologia de São Paulo, através de questionário de qualidade de vida para pacientes em tratamento dialítico KDQOL-SF™1.3, questionário socioeconômico e dados clínicos descritos em prontuário eletrônico. **Resultados:** No total dos pacientes, houve predomínio do sexo masculino, da cor/raça autodeclarada parda e preta, ensino fundamental incompleto e em benefício previdenciário/assistencial. Os pacientes sem DAC encontram-se aproximadamente dois anos a mais em tratamento dialítico. Entre as dimensões do KDQOL-SF™1.3, os pacientes com DAC apresentaram melhores índices de qualidade de vida. **Conclusão:** A qualidade de vida dos pacientes com DRC em hemodiálise que apresentam diagnóstico de DAC, apresentou-se relativamente melhor do que a dos pacientes sem DAC. Não houve diferenças sociodemográficas relevantes entre os grupos.

Descritores: Insuficiência renal crônica; Doença da artéria coronariana; Diálise renal; Qualidade de vida; Serviço social.

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Received on 05/03/2018,
Accepted on 05/07/2018

INTRODUCTION

In recent years, chronic kidney disease (CKD) has been recognized as a global public health problem. Defined as a renal lesion with progressive and irreversible loss of kidney function,¹ CKD is linked with increased incidence and prevalence of high morbidity and mortality and currently affects 10% of the world's population.² This increase has been prompted by significant growth in the number of patients with arterial hypertension and diabetes mellitus, the main comorbidities associated with the development of renal dysfunction, and the increase in population life expectancy.³

At advanced stages, it is necessary to perform renal replacement therapy (RRT)—hemodialysis (HD), peritoneal dialysis or kidney transplant—as a substitute for the function of the kidneys, to relieve the symptoms of the disease and preserve the life of the patient, although without expectation of a cure.⁴ In the Brazilian population, there has been a significant increase in patients in RRT, from 42,695 in 2000 to 91,314 in 2011.³ Brazil has the fourth largest population on dialysis in the world.⁵

The scientific literature reports that 90% of cases diagnosed with CKD in RRT come from developing countries^{3,6} due to the high cost of treatment, difficulty accessing therapy, deficiencies in health promotion programs and the primary prevention of risk factors, in addition to the low reporting rate of patients with the disease.⁷ CKD is also one of the main determinants of risk for cardiovascular events. It has been identified in the literature as an independent predictor for the progression of coronary artery disease (CAD).⁸ Studies have shown that the rates of morbidity and mortality attributable to cardiovascular causes in this population are quite high.⁹

Biopsychosocial limitations experienced by patients imply significant changes in social and family life because, in addition to their inability to work, these limitations also interfere directly with everyday activities and leisure time and have a great impact on quality of life (QOL). The World Health Organization (WHO) defines quality of life as "the individual's perception of their position in life, in the context of the culture and value system in which they live and in relation to their goals, expectations, standards and concerns" (p.).⁹

There has been significant growth in the measurement of QOL as an indicator of health outcomes in patients with CAD. In the clinical course of the disease, there are many aspects wherein the QOL of patients can be affected, including symptoms of angina and heart failure, limited physical ability, and the psychosocial stress associated with chronic disease. Therefore, the improvement of health-related quality of life is considered important as a primary outcome and in determining therapeutic benefit.^{10,11}

In view of the analyses undertaken, we note that the study population requires specialized health care. Multi-disciplinary action is required to better assist these individuals and provide improved quality of life in the course of the disease, as recommended by Administrative Rule GM/MS No. 389/2014, which establishes the social worker as a member of the healthcare team.¹²

In this context, we emphasize the importance of the social worker's role in identifying and analyzing the social determinants that influence the health-disease process.¹³ Social workers provide socio-educational practice and mediate

vis-à-vis other professionals, patients, and family members who present social demands that may interfere with therapy. They propose coping alternatives for dealing with presented situations and provide guidance on lifestyle changes, the importance of treatment adherence, and necessary social and family support.

In view of the above information, the objectives of the present study are (1) to evaluate the impact of the presence of CAD on the quality of life of patients with chronic kidney disease on hemodialysis and (2) to identify differences in the socio-demographic profile of these patients, according to the presence of CAD.

METHOD

This study was submitted to and approved by the Research Ethics Committee of the Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (HCFMUSP), through Protocol 63825117.7.0000.0068. All participants were informed of the objectives of the research and voluntarily signed an informed consent form.

This cross-sectional and descriptive study was conducted at the Heart Institute (InCor/HCFMUSP) in the hypertension and social service units, from July 2016 to February 2017.

Included in the study were male and female adult patients (age ≥ 18 years) with chronic renal disease who were on hemodialysis for at least three months, admitted to the InCor hypertension unit, with and without the presence of CAD diagnosed by coronary angiography; obstruction greater than or equal to 50% of at least one major coronary artery was considered. Patients with neurological or cognitive changes described in the electronic health record that prevented them from completing the data collection instruments were excluded.

The study sample consisted of 51 patients, divided into two groups: 21 without CAD and 30 with CAD. Appointments were scheduled in the outpatient hypertension ward during the data collection period.

The primary endpoint of interest was quality of life, measured using the KDQOL-SF™1.3, a specific instrument for assessing QOL of chronic renal patients on dialysis, validated for the Brazilian population. The questionnaire has 80 items and includes a generic measure (SF-36) consisting of 36 items divided into eight domains: physical functioning, limitations caused by physical health problems, limitations caused by emotional health problems, social functioning, mental health, pain, vitality (energy/fatigue), and perceptions of general health and current health status compared to the previous year. These domain scores are computed separately and analyzed descriptively, using percentages. There is also a specific measure of chronic kidney disease, with 43 items divided into 11 domains: symptoms/problems, effects of kidney disease on daily life, the overload imposed by kidney disease, ability to work, cognitive function, quality of social interactions, sexual function, sleep, social support, encouragement by dialysis staff, and patient satisfaction with treatment.¹⁴

The domain scores range from zero to 100, so that values equal to or below the average score (≤ 50) in each domain analyzed indicate low quality of life.¹⁴ The KDQOL-SF™ 1.3 data were converted using SAS program™ 6.12 and presented in terms of mean values and standard deviations (\pm SD).

The secondary outcome of the research was to determine the participants' socio-demographic profile, charted using a semi-structured form. For economic classification we used the 2016 Brazilian Economic Classification Criteria, developed by the Brazilian Association of Market Research Companies. The clinical characteristics were collected using an electronic health spreadsheet.

For data analysis, we used the Statistical Package for the Social Sciences (SPSS) software for Windows, version 21.0. The normality of the distributions was verified using the Kolmogorov-Smirnov test. Independent Student's *t*-tests were used to establish the statistical significance of the differences between the groups (CAD and non-CAD) for continuous variables and Chi-square tests were conducted for categorical variables.

RESULTS

Table 1 presents the demographic profile of the population studied. There was a predominance of males in both groups; there was no difference in mean age, and the participants in both groups mostly described themselves as brown/black. The majority of participants reported having incomplete elementary school education and adherence to the Catholic religion.

In terms of living situation, most participants from the city of São Paulo resided in their own homes, endowed with full sanitary facilities, with an average of three people per domicile; spouses comprised the main caregivers.

In relation to employment, most patients were not economically active, according to the Brazilian Institute of Geography and Statistics (IBGE). In both groups, most participants received pension benefits (retirement due to disability, by age or time of contribution; illness and death benefits). Only one participant (non-CAD group) was a beneficiary of the Bolsa Família social program. Most participants belonged to economic class C (about three times the minimum wage), based on the 2014 Nationwide Household Sample Survey (PNAD). Most participants in both groups used public transportation to access hemodialysis.

As for clinical characteristics (Table 2), the average duration of HD treatment was 70.3 ± 53.1 months (60.0 ± 41.5 in the CAD group *versus* 64.4 ± 85.1 in the non-CAD group; $p < 0.05$). Hypertension was the most prevalent comorbidity in both groups of patients, representing 100.0% in the group with CAD and 90.5% in the non-CAD group. There was a greater number of participants with diabetes mellitus (50%) in the group with CAD and a higher prevalence of dyslipidemia in the non-CAD group (14.3%).

In relation to the KDQOL-SF™ 1.3 questionnaire, for item 2, which assesses current health status compared to the situation in the previous year, a majority of patients in both groups said there had been no change in their state of health (40.0% in the CAD group and 42.9% in the non-CAD group), and approximately one-third of patients in both groups reported some improvement in their health status: "much better now" (30.0% in the CAD group) and "slightly better now" (28.6% in the non-CAD group). Concerning item 22, which assesses participants' perceptions of their current health, the vast majority (63.3% in the group with CAD and 71.4% in the non-CAD group) evaluated their health as "average" on a health status scale with the options worse, average, and best.

Comparing the domains of the KDQOL-SF™ 1.3 questionnaire, as presented in Table 3, the group with CAD obtained better QOL scores for the following variables: list of symptoms and problems, cognitive function, quality of social interaction, sexual function, social support, encouragement by the dialysis team, limitations caused by problems of physical health, and emotional well-being.

DISCUSSION

The main finding of the study was that the quality of life of the CAD group was better in some ways than that of the non-CAD group. Regarding socio-demographic characteristics, no differences were observed between groups, except in relation to education, with lower levels for the group without CAD. Despite the statistical difference, we highlight the low socioeconomic status of the patients in the study, similar to the characteristics of the population with chronic disease in developing countries, in general.¹⁵

No group differences in clinical characteristics were noted, except the length of HD was higher in the group without CAD.

Certain factors may be involved in these differences, including sample size, the greater duration of HD treatment for the group without CAD, and the fact that presence of CAD requires greater care and attention to the patient. However, the real reason for the better QOL indicators in the CAD group in our study is not fully known.

The patient with CKD on dialysis lives every day with a disease requiring long-term treatment with no expectation of a cure. In conjunction with the evolution of the disease and its complications, this situation causes significant limitations and changes in everyday life, with repercussions for QOL for both the patients themselves and for their social and family network.

Several factors that influence QOL of patients in HD have been identified. The study by Cavalcante et al.¹⁶ in northeastern Brazil, where QOL was assessed using the KDQOL-SF™ 1.3, indicated that the main socio-demographic factors associated with QOL were low education levels (\leq eight years), unemployment, residence in rural areas, and the presence of cardiovascular disease. Literature reviews indicate that the KDQOL-SF™ 1.3, which was employed in our study, has been widely used to measure quality of life among patients undergoing HD in different countries.^{17,18}

The predominance of male patients of productive age (mean: 54.3 ± 11.6 years) with low family income observed in our sample is similar to the findings of previous studies.¹⁸ Descriptions of samples in the literature indicate the population in treatment for CKD is predominantly composed of male patients aged 50 to 60, who have not completed elementary school and are not economically active.^{15,19} Other studies point to the socioeconomic situation of patients with CKD, determined by individual income, occupation, education, wealth, and housing, as a potential factor for the progression of the disease and, therefore, a poorer quality of life.²⁰

The worst quality of life score in both groups was for "occupational status," which concurs with the literature.^{9,16,18} Although the difference is not statistically significant, it is important to note that complications arising from treatment

Table 1. Sociodemographic profile of the sample. São Paulo. 2017.

Variable	Non-CAD (n = 21)	CAD (n = 30)	Total (n = 51)	p
Age	53.3±12.8	55.0±10.9	54.3 ± 11.6	0.666
Sex, n (%)				
Male	12 (57.1)	20 (66.7)	32 (62.7)	0.489
Female	9 (42.9)	10 (33.3)	19 (37.3)	
Color/Race, n (%)				
White	6 (28.6)	6 (20.0)	12 (23.5)	0.478
Black (very dark)	9 (42.8)	8 (26.7)	17 (33.3)	0.227
Brown	5 (23.8)	13 (43.3)	18 (35.4)	0.151
Yellow	0 (0.0)	2 (6.7)	2 (3.9)	0.227
Not declared	1 (4.8)	1 (3.3)	2 (3.9)	0.796
Schooling, n (%)				
Incomplete Primary	14 (66.6)	9 (30.1)	23 (45.2)	0.010
Complete Primary	0 (0.0)	7 (23.3)	7 (13.7)	0.017
Incomplete Secondary	1 (4.8)	4 (13.3)	5 (9.8)	0.311
Complete Secondary	5 (23.8)	7 (23.3)	12 (23.5)	0.969
Incomplete Higher Education	0 (0.0)	2 (6.7)	2 (3.9)	0.227
Complete Higher Education	1 (4.8)	1 (3.3)	2 (3.9)	0.796
Religion, n (%)				
Catholic	11 (52.4)	16 (53.4)	27 (52.9)	0.947
Evangelical	4 (19.0)	6 (20.0)	10 (19.7)	0.969
Spiritist	1 (4.8)	3 (10.0)	4 (7.8)	0.227
No Religion	3 (14.3)	4 (13.3)	7 (13.7)	0.923
Other*	2 (9.5)	1 (3.3)	3 (5.9)	0.355
Marital Status, n (%)				
Single	6 (28.6)	5 (16.7)	11 (21.6)	0.309
Married	15 (71.4)	22 (73.3)	37 (72.5)	0.881
Widowed	0 (0.0)	1 (3.3)	1 (2.0)	0.398
Divorced	0 (0.0)	2 (6.7)	2 (3.9)	0.227
Origin, n (%)				
São Paulo/Capital	12 (57.1)	15 (50.0)	27 (52.9)	0.615
Greater São Paulo	7 (33.3)	12 (40.0)	19 (37.3)	0.628
Other Municipalities/SP	1 (4.8)	3 (10.0)	4 (7.8)	0.493
Other States	1 (4.8)	0 (0.0)	1 (2.0)	0.227
Home Ownership, n (%)				
Owned Outright	13 (61.9)	23 (76.7)	36 (70.6)	0.255
Rented	4 (19.0)	3 (10.0)	7 (13.7)	0.355
Making Payments	1 (4.8)	1 (3.3)	2 (3.9)	0.796
Ceded	3 (14.3)	3 (10)	6 (11.8)	0.640
Basic Sanitation, n (%)				
Full	19 (90.5)	29 (96.7)	48 (94.1)	0.355
Partial	2 (9.5)	1 (3.3)	3 (5.9)	
Dwellers per domicile	3.2±1.4	3.0±1.2	3.1±1.2	0.244
Relationship of caregiver, n (%)				
Spouse	10 (47.7)	15 (50.0)	25 (49.0)	0.867
Children	3 (14.3)	3 (10.0)	6 (11.8)	0.640
Parents	2 (9.5)	4 (13.3)	6 (11.8)	0.678
Family or Friend	4 (19.0)	3 (10.0)	7 (13.7)	0.355
No Caregiver	2 (9.5)	5 (16.7)	7 (13.7)	0.466
Employment, n (%)				
Household Chores	2 (9.5)	0 (0.0)	2 (3.9)	0.085
Unemployed	3 (14.3)	3 (10.0)	6 (11.8)	0.640
Beneficiary Assistance	2 (9.5)	4 (13.3)	6 (11.8)	0.678
Welfare	14 (66.7)	23 (76.7)	37 (72.5)	0.431
Social Program, n (%)	1 (4.8)	0 (0.0)	1 (2.0)	0.227
Economic Classification, n (%)				
Class A	0 (0.0)	3 (10.0)	3 (5.9)	0.135
Class B1	2 (9.5)	3 (10.0)	5 (9.8)	0.955
Class B2	1 (4.8)	3 (10.0)	4 (7.8)	0.493
Class C	15 (71.4)	20 (66.7)	35 (68.7)	0.718
Class D-E	3 (14.3)	1 (3.3)	4 (7.8)	0.152
Transportation to HD, n (%)				
Public	13 (61.9)	14 (46.7)	27 (52.9)	0.283
Personal vehicle	2 (9.5)	4 (13.3)	6 (11.8)	0.678
Third Party	0 (0.0)	3 (10.0)	3 (5.9)	0.135
Other**	6 (28.6)	9 (30.0)	15 (29.4)	0.912

HD = hemodialysis; * Jehovah's Witness; **Attention and transportation provided by the Health Secretariat; mean ± SD; Student's t-test; Chi square test.

Table 2. Clinical characteristics of the sample. São Paulo, 2017.

Variable	Non-CAD (n = 21)	CAD (n = 30)	Total (n = 51)	P
Time in HD (months)	85.1±64.4	60.0±41.5	70.3 ± 53.1	0.013
Prior renal Tx, n (%)	4 (19.0)	3 (10.0)	7 (13.7)	0.355
SAH, n (%)	19 (90.5)	30 (100.0)	49 (96.1)	0.085
DM, n (%)	7 (33.3)	15 (50.0)	22 (43.1)	0.367
DLP, n (%)	3 (14.3)	1 (3.3)	4 (7.8)	0.152
Smoker, n (%)	2 (9.5)	3 (10.0)	5 (9.8)	0.955
Obesity, n (%)	2 (9.5)	1 (3.3)	3 (5.9)	0.355
Previous CV event (AMI/Stroke), n (%)	3 (14.3)	4 (13.3)	7 (13.7)	0.923

HD = hemodialysis; Tx = transplant; SAH = systemic arterial hypertension; DM = diabetes mellitus; DLP = dyslipidemia; CV = cardiovascular; AMI = acute myocardial infarction; CAD = coronary arterial disease; mean ± SD; Chi square test.

Table 3. Domains of the KDQOL-SFTM 1.3. São Paulo, 2017.

Domain	Non-CAD (n = 21)	CAD (n = 30)	Total (n = 51)	p
List of symptoms/problems	69.9 ± 19.4	81.6 ± 13.6	76.8 ± 17.1	0.013
Effects of kidney disease	64.2 ± 17.2	70.3 ± 20.9	67.8 ± 19.5	0.355
Overload of kidney disease	28.2 ± 20.8	39.1 ± 23.6	34.1 ± 23.0	0.348
Employment	16.6 ± 35.5	11.6 ± 25.2	13.7 ± 30.1	0.148
Cognitive functioning	77.1 ± 29.3	92.8 ± 10.7	86.4 ± 21.7	< 0.001
Quality of social interaction	73.9 ± 25.5	88.0 ± 15.8	82.2 ± 21.3	0.043
Sexual function	91.0 ± 11.8*	98.9 ± 3.6**	96.0 ± 8.3	< 0.001
Sleep	53.5 ± 26.7	68.1 ± 29.1	62.1 ± 28.8	0.623
Social support	79.3 ± 34.9	88.8 ± 17.1	84.9 ± 26.0	0.009
Encouragement by the dialysis team	67.8 ± 42.8	84.1 ± 32.3	77.4 ± 37.5	0.010
Patient satisfaction	58.7 ± 17.7	55.0 ± 13.9	56.5 ± 15.3	0.105
Physical functioning	45.0 ± 27.9	56.0 ± 24.0	51.4 ± 26.0	0.435
Limitations of physical functioning	21.4 ± 30.9	60.0 ± 40.2	44.1 ± 41.1	0.008
Pain	44.6 ± 32.5	67.5 ± 31.1	58.0 ± 33.3	0.777
Emotional well-being	64.0 ± 34.5	80.0 ± 19.1	73.4 ± 27.4	0.003
Limitations of emotional functioning	65.0 ± 45.3	57.7 ± 40.0	60.7 ± 42.0	0.409
Social functioning	58.3 ± 31.2	71.2 ± 27.8	65.9 ± 29.6	0.890
Energy/fatigue	47.1 ± 27.5	62.5 ± 26.5	56.1 ± 27.7	0.633

CAD = coronary arterial disease; *7 active patients; **12 active patients; mean ± SD; Student's t-test for independent samples.

affect the functional abilities of patients and limit their access to activities of daily living and employment. These limitations, in turn, imply lower socioeconomic conditions, affecting the individual's family dynamics as a whole and, consequently, the factors that influence quality of life. Braz,¹³ in his study of the social aspects of chronic kidney disease, points out that dialysis treatment and the chronic condition are sources of stress, in light of changes that impact the patient's lifestyle, such as social isolation, loss of employment, welfare dependency, interference with leisure time, loss of autonomy, dependency on a caregiver, changes in body image, and fear of death.

On the other hand, the study by Gerasimoula et al.²¹ found that QOL scores were better for participants in hemodialysis under 60 years of age who had a higher educational level, better information about health problems, better adherence to recommendations and suggested diet, and who had good relationships with the health team and other patients, as well as the support of family members. However, in the present study, patients in the CAD group who had better quality of life indices did not present relevant sociodemographic differences compared to the group without CAD.

Duration of hemodialysis treatment may have been a determining factor for better quality of life scores in the CAD group in our study; yet, no available literature was found for comparison. Although not specifically involving patients with CAD, Gerasimoula et al.²¹ found an association

between increased duration of the hemodialysis session and poorer quality of life in patients.

We highlight the dearth of studies in the literature that have evaluated the impact of CAD on quality of life for patients in HD, which leads us to assume that this would be the first study conducted in Brazil with this goal. A reasonable hypothesis would be that the presence of CAD could interfere with the quality of life of patients in hemodialysis; however, contrary to our expectations, we found that the group of CAD patients had better quality of life scores compared to their peers without CAD. As previously mentioned, although we have not found objective causes that might explain these differences, we suggest that because of their knowledge of heart disease, the CAD group would tend to seek out better care and, consequently, feel better than other patients. Another factor could be the longer duration of dialysis treatment in the non-CAD group, which could lead to greater overall harmful effects, explaining the greater number of symptoms and poorer QOL in this group.

CONCLUSION

The quality of life of patients with chronic kidney disease in dialysis treatment was relatively better for those diagnosed with CAD than for those without CAD. The presence of CAD did not elicit poorer quality of life among the patients studied.

The greatest differences between the groups were found in the following domains: list of symptoms and problems, cognitive function, quality of social interaction, sexual function,

social support, encouragement by the dialysis team, limitations caused by physical health problems, and emotional well-being. There were no relevant differences in sociodemographic characteristics between the groups.

We note that the population under study requires specialized health care, demonstrating the importance of multidisciplinary care of patients with chronic kidney disease on hemodialysis. We stress the educational aspects of the orientation and follow-up of these patients conducted by the social worker, as a professional who addresses factors that make the proposed therapy more difficult and acts to promote health and ensure the implementation of social rights and access to health services.

The scenario presented in our study points to a need for effective public policies for the early identification and appropriate treatment of patients with risk factors for CKD in primary health care.

The small sample, especially in the group without coronary heart disease poses a limitation for this study, which limits the generalization of results. Therefore, we stress the need for further research on the topic.

Finally, we emphasize that this study does not exhaust the discussion of aspects related to the experience of these patients. We hope that our findings will contribute to the acquisition of new knowledge for health professionals.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest in conducting this study.

AUTHORS' CONTRIBUTIONS: Each author contributed individually and significantly to the preparation of the manuscript. SCJS was the primary author of the paper. EFAS, CJPN, LAB, and JJGL participated actively in the construction of the study and in drafting and reviewing the manuscript and contributed to the approval of the final version.

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